



Seismic Exchange, Inc.

4805 Westway Park Boulevard • Houston, Texas 77041
(832) 590-5100 Fax: (832) 590-5261

Sent via email only

September 3, 2020

Mr. David Albright
Manager, Groundwater Protection Section
Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94150-3901

Re: Confidential Business Information Substantiation

Dear Mr. Albright,

On May 8, 2020, Clean Energy Systems ("CES") supplemented its February 18, 2020 Underground Injection Control (UIC) Class VI Pre-Construction permit application by adding figures. Some of these figures contain seismic data (or derivatives) that were licensed from Seismic Exchange Inc. ("SEI") by CES. On SEI's behalf, CES has indicated that certain figures contain information that should be classified as confidential business information ("CBI"). The U.S. Environmental Protection Agency ("EPA" or "Agency") via August 14, 2020 letter ("Substantiation Request") is seeking to determine the entitlement to confidentiality of those figures in EPA's possession.

In response to your request for substantiation of CBI, SEI has thoroughly reviewed the images contained within the UIC Class VI Permit Application Narrative (the "Narrative"). The particular figures designated as CBI belonging to SEI are listed in the chart below along with the page number from the Narrative on which they are found:

Figure #	Narrative Page #	Description	SEI Claims CBI? (Y=Yes, N=No)	CBI covers Entire (E) or Partial (P) Figure
14	28	2D seismic line (shotpoint) map	N	NA
15	29	Seismic Well Tie: Line W-SJ-202	Y	P
16	30	W-SJ-202 seismic line (depth)	Y	E
17	30	W-SJ-209 seismic line (depth)	Y	E
18	31	W-SJ-013W 2D seismic line (in depth)	Y	E
19	31	3D View of interpreted faults on the 2D seismic lines	Y	P
20	32	3D perspective of the depth integrated geophysical model	Y	P
32	46	Injection well cross-section traverse map (shotpoint map)	N	NA
33	47	3D Perspective of N-S and E-W porosity (seismic line)	Y	P

Figures 14, 15, 16, 17, 18, 19, 20, 32, and 33 and all are related to geophysical data owned or exclusively licensed by SEI. In reviewing the figures, SEI has determined that Figures 14 and 32 are maps and the only SEI information disclosed in these figures is the location of the specific seismic lines of interest and the locations of shotpoints or stations from those seismic lines; this type of map information is referred to in the geophysical industry as a "shotpoint map" and is reasonably available in limited quantities to potential SEI clients without confidentiality restrictions in place. Therefore, Figures 14 and 32, as submitted to the EPA, do not contain CBI and SEI hereby waives any confidentiality claims as to Figures 14 and 32. SEI believes that SEI CBI comprises all or a substantial portion of Figures 15-20 and 33. As a result, those figures are attached hereto on Attachment "1" to ensure that it is clear which images are being referenced; however, the designated SEI CBI portion is blacked out and labelled in white as "SEI CBI" to preserve the confidentiality of SEI's seismic data.

Before answering the specific questions posed in the Substantiation Request as to the remaining Figures (15-30 and 33), the following general information about the geophysical data industry, and SEI in particular, may provide important context and terminology. SEI was founded in 1975 by Mr. P C Havens and remains a privately held, family owned company today. Initially, SEI acted solely as the licensor of geophysical (seismic) data that SEI brokered on behalf of various oil companies. Subsequently, SEI began to acquire seismic data on its own behalf that was speculative in nature and also began to purchase the geophysical assets of others to supplement its library. Today, SEI's library comprises more than 1,500,000 linear miles of 2D seismic data and approximately 100,000 square miles of 3D seismic data. SEI markets seismic data licenses to the oil and gas industry. Seismic data is considered a trade secret and is treated as highly confidential. SEI seismic data is only released to licensees for a limited time and subject to execution of a seismic data license agreement which contains restrictions on the use and disclosure of the geophysical data and any derivatives thereof. SEI's license agreement has naturally changed over the years, but since 2004 when SEI implemented a Master Geophysical Data Use License ("SEI MLA") based on the model formulated by the International Association of Geophysical Contractors ("IAGC"), the MLA has only experienced fairly minor changes. The SEI MLA is attached as Attachment "2" for your reference.

The remaining Figures 15-20 and 33 directly display or incorporate the actual geophysical data (traces) that are owned or exclusively licensed by SEI and were provided to CES subject to an SEI MLA. These seismic data are considered a valuable trade secret and asset of SEI. Due to the similarity of the CBI (2D seismic data images) in each of these figures, I will respond to each of the 11 questions in bold font with an answer that is applicable to all 7 Figures.

1. *For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a specified event, or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.*

SEI requests that the CBI be maintained as confidential permanently.

2. *Information submitted to the EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question #1?*

Seismic data does not typically “grow stale” despite advancements in technology. Today, we still license seismic data that was originally generated in the 1960’s, so that seismic data, while having been in existence for nearly 60 years, is still of value to oil and gas companies and other industries and is licensed in exchange for a fee and subject to an SEI MLA. The Figures display information from 3 different 2D seismic lines: W-SJ-013W generated in 1983 and W-SJ-202 and W-SJ-209 generated in 1990. These seismic lines are 30+ years old and are still held confidentially and only provided to licensees subject to an SEI MLA or other confidentiality terms. Additionally, the costs and liabilities associated with acquiring new seismic data are quite high and, due to urban sprawl, environmental or wildlife concerns, or current oil and gas development, many seismic lines cannot be “re-acquired”.

3. *What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information be considered confidential?*

SEI goes to great lengths to protect its seismic data as the secret nature of the seismic data is key to its value and thus SEI’s revenue stream for that seismic data. Potential licensees are allowed to view the data only in supervised and controlled environments prior to a license purchase. All license purchases are subject to execution of an SEI MLA. The SEI MLA allows certain disclosures to third parties conditioned upon the third party signing a confidentiality agreement. Any desired disclosure that is not expressly allowed in the SEI MLA must be submitted to SEI for written approval, which may be withheld in SEI’s sole discretion, and, if allowed, is conditioned upon efforts to obscure or “sanitize” the seismic data so that those third parties who obtain copies of the data do not know which data it is or where it is located and thus are unable to utilize the seismic data in any meaningful way.

4. *Is the information contained in any publicly available material such as the Internet, publicly available databases, promotional publications, annual reports, or articles? If so, specify which.*

As mentioned above, such publicly available images of SEI seismic data, if any, should be “sanitized” so as to protect the data from use by third parties unless such third party first obtains a license to use such seismic data from SEI. SEI’s guidelines for publication of seismic data are attached as Attachment “3” for your reference

5. *Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?*

These seismic data are not generally available to the public. Seismic data is released to licensees subject to an SEI MLA or may be utilized in journals, papers, investment brochures, etc., provided that the seismic data is sanitized so that any third party would be unable to utilize or “reverse engineer” the data for use outside of a license obtained from SEI. (See Attachment “3”). Prior to granting permission for any broad disclosure of data outside of a confidentiality or license agreement, SEI has a team that reviews the seismic data that is to be

disclosed for adherence to our guidelines and any permission is set forth in writing detailing the sanitization and referencing the applicable license agreement as well as including the specific images being disclosed, which is signed by SEI and the potential disclosing party. Please note that SEI discussed at length with CES how to handle the disclosure of this information and, in this particular instance, the seismic data cannot be “sanitized” to protect its confidential nature under our normal processes as the actual locations are critical to the UIC permit process and the sanitization of the data would result in removal of the line numbers, shotpoint location maps (Figures 14 and 32), etc., thus rendering the information nearly useless for the purpose of the UIC permit process.

6. *Has any governmental body made a determination as to the confidentiality of the information? If so, please attach a copy of the determination.*

I am unaware of any governmental ruling as to the confidentiality of the specific seismic data lines/images displayed in Figures 15-20 and 33; however, seismic data has generally been treated as confidential, trade secret information within the oil and gas industry and under various state and federal laws. See SEI’s response to Question 10 below.

7. *For each item or category of information claimed as confidential, explain with specificity why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as substantial, and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?*

You are not required to respond to this question in light of the Supreme Court’s decision in *Food Marketing Institute v. Argus Leader Media*, No. 18-481 (U.S. Supreme Court, June 24, 2019). As a result of that decision, EPA will not consider whether there is substantial competitive harm in evaluating your CBI claim.

It is not so much substantial harm from competitors, but significant economic harm to SEI’s potential revenue stream from these data. SEI seismic data displayed to the public in this manner, with the advances in technology today, may be scanned, rasterized, vectorized, and migrated to create useable data in industry standard (SEGY) format that would allow a third party to either utilize the data on its own behalf or, and this is where there could be substantial competitive harm, provide the data to others in exchange for a fee, thus preventing them from licensing the data from SEI and therefore causing significant economic harm to SEI’s business.

8. *Do you assert that the information is submitted on a voluntary or a mandatory basis? Please explain the reason for your assertion. If you assert that the information is voluntarily submitted information, please explain whether the information is the kind that would customarily not be released to the public.*

These Figures were voluntarily submitted to the EPA by CES, SEI’s licensee. CES believed the seismic data figures to be critical to the Narrative and thus the UIC permit process, and SEI granted permission for such submission subject to the seismic data being marked as CBI and treated confidentially so as to not place the seismic data in the public domain.

9. *Whether you assert the information as voluntary or involuntary, please address why disclosure of the information would tend to lessen the availability to the EPA of similar information in the future.*

The disclosure of these Figures would absolutely lessen the availability to the EPA of similar information in the future. Should the EPA determine that the seismic data does not comprise CBI and thus disclose the seismic data in these figures, SEI would not be willing to engage in our typical licensing transactions in the future with parties intending to use the data for these types of projects requiring government approval and will not allow any further disclosure of any data licensed to the EPA or other government agencies.

10. *If you believe any information to be (a) trade secret(s), please so state and explain the reason for your belief. Please attach copies of those pages containing such information with brackets around the text that you claim to be (a) trade secret(s).*

The seismic data images as displayed in Figures 15-20 and 33, in and of themselves, comprise valuable SEI trade secrets. SEI uses extra diligence in protecting its trade secret assets by requiring all employees to sign confidentiality agreements, carefully restricting viewing of the data prior to a license purchase, implementing strict, control processes for the handling and release of seismic by its employees to licensees, and entering into SEI MLAs with all licensees prior to releasing data to a licensee.

According to the Defend Trade Secrets Act of 2016 (18 USC §1839), “the term “trade secret” means all forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorialized physically, electronically, graphically, photographically, or in writing if— A) the owner thereof has taken reasonable measures to keep such information secret; and (B) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public;....”

Likewise, the Texas Uniform Trade Secrets Act (Chapter 134A of the Texas Civil Practice and Remedies Code) states that:” “Trade secret” means all forms and types of information, including business, scientific, technical, economic, or engineering information, and any formula, design, prototype, pattern, plan, compilation, program device, program, code, device, method, technique, process, procedure, financial data, or list of actual or potential customers or suppliers, whether tangible or intangible and whether or how stored, compiled, or memorialized physically, electronically, graphically, photographically, or in writing if: (A) the owner of the trade secret has taken reasonable measures under the circumstances to keep the information secret; and (B) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information.”

The Texas Supreme Court has long recognized geophysical (seismic) data as a trade secret within the oil and gas industry and at law and more recently the Western District of Texas bankruptcy

court also found seismic data to be subject to trade secret protection. *In re Bass*, 113 S.W.3d at (Tex. 2003) and *In re TXCO Res., Inc.*, 475 B.T. 781 (Bankr. W.D. Tex. 2012). Companies owning seismic libraries consider seismic data to be a trade secret and reference it as such in their licensing agreements. The model seismic license agreement entitled the Master Geophysical Non-Exclusive Data-Use License (the “Model MLA”) promulgated in 2014 by the IAGC provides in Section 2.1: “Licensor represents, and Licensee acknowledges, that the Data and Derivatives, regardless of the form or the medium on which they are stored, constitute a valuable and highly confidential trade secret that are not generally available and are the sole property and proprietary information of Licensor (and/or those on behalf of which Licensor acts).” This language is unchanged from prior model license agreements (e.g. the 2009 and 2003 IAGC Model MLAs). Additionally, the IAGC regularly comments on proposed legislation both in the US and abroad and unequivocally states that seismic data is “...confidential, proprietary, a trade secret and/or copyrightable confidential information in nature and should not be released to the public.” (Excerpt from August 2015-IAGC Position on the Release of Confidential and/or Proprietary Information)

SEI’s seismic data meets the definitions above for a trade secret as it is: i) scientific and technical information (energy recorded as it moves through the earth and compiled using algorithms based in physics and geophysics); ii) SEI utilizes its best efforts, as described throughout SEI’s responses herein, to maintain the confidentiality of the seismic data and only disclose such seismic information under confidentiality restrictions; and iii) the seismic derives independent economic value from not being generally known and not being readily available from others (if readily available without payment of a license fee to SEI, there would be no economic incentive for SEI to acquire and maintain its extensive seismic library, much of which is irreplaceable, due to monetary costs and cultural and environmental changes).

11. *Explain any other issue you deem relevant (including, if pertinent, reasons why you believe that the information you claim to be CBI is not emission data or effluent data).*

SEI has made a substantial investment over its 45 years to develop its seismic library, portions of which are irreplaceable. Our deliverables to a licensee consist of seismic images in tiff format (“TIFF/Section”), processed seismic data in SEG Y format (“Processed Data”) and raw field data (“Field Data”). For many years, all that was provided to a licensee was the TIFF/Section. As technology advanced and ancillary products such as Processed Data and Field Data became more readily available and easier to capture, store and deliver, those were added to the deliverables. We do not always have Processed Data or Field Data available and a TIFF/Section is still sufficient for a licensee to proceed with a license of SEI seismic data. A release of these seismic data images (Figures 15-20 and 33) without restriction to the public would essentially provide the equivalent of a TIFF/Section and, while some effort would be involved, the TIFF/Section can be scanned and manipulated to create Processed Data; thus providing those persons with useable seismic data without first obtaining a license from SEI and significantly devaluing those portions our seismic data library. To an outsider, the portion of our seismic data library at issue here may seem small, but any breach of the confidentiality of our seismic data is material as it goes to the heart of our business and would slowly erode our extensive efforts to protect our trade secrets.

SEI appreciates this opportunity to express its belief that the seismic images displayed by CES in the Narrative in Figures 15-20 and 33 are highly confidential and trade secrets of SEI and should be treated as CBI and not disclosed to the public. If you have any questions, please do not hesitate to contact me at 832-590-5206 or jhardie@seismicexchange.com.

Sincerely,
Seismic Exchange, Inc.

A handwritten signature in black ink that reads "Julie Kay Hardie". The signature is written in a cursive, flowing style.

Julie Kay Hardie
Vice President-Legal

Enclosures:

Attachment "1"-Redacted Figures Comprising SEI CBI
Attachment "2"-SEI MLA
Attachment "3"-SEI General Guidelines for Publication